Testing Evolutionary Theory of Household Consumption Behavior in the case of Novelty

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1 Evolutionary theory applied to consumer behavior

Neoclassical theory	*Evolutionary theory*
- Ignores **Novelty** and uncertainties - Household have well defined preferences	- Considers **Novelty** and Uncertainties - Consumer behavior is in continuous change - Changes involve learning

Evolutionary theory follow the Lancasterian point of view concerning **Novelty**. **However, *Evolutionary approach*** might be compatible with novelty processes, i.e. with the emergence of new Lancasterian characteristics.

The emergence of new goods characteristics implies and requires **learning**

2 Hypothesis:

H1: Novelty: the set of goods characteristics evolve over time, contrary to Lancasterian approach

H2: Learning involves interdependence between New good characteristics

3 Research methodology Model

Good (G) = Set {C1; C2; …Cn}
f(t) : G → Temporal Continuity
Gt/G't → Comparison inter product

Good (G) = Set {C1; C2; …Cn}
"G" → Sample of product
"C" → consumer preferences

4 Data Collection from:

Consumer Guides : Reports & Tests 1960-2013

Interviews	Nbr of consumer Guides viewed	Data Source	Consumer Products	Period of time
4 Meetings with consumer guides Experts: 1. Validate and reinforce the quality of our tool. 2. Crosscoding and validate the newness of characteristics	***1960 – 2013*** → 12*(nbr of years) → **636** Consumer Guides journals	« Que Choisir? »	Iron	1962 - 2013
		« Que Choisir? »	Vacuum Cleaner	1969 - 2013
		« Que Choisir? »	Toothbrush	1975 - 2013
		« Que Choisir? »	Mobile Phone	1996 - 2013
		« Que Choisir? »	GPS	2007 - 2013

5 Results:

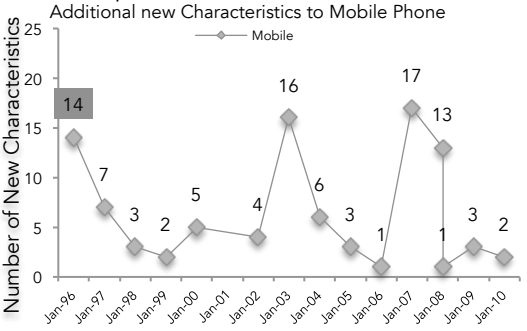
A. **Novelty:** Characteristics space of goods is permanently in evolution

In all five cases, **the characteristics space** of the different goods is permanently in evolution, by the addition of **new characteristics** over time.

	Period of time	Nbr of years	Nbr of consumer guide surveys	Total nbr of new characteristics	New characteristics per Year
Mobile Phone	1996 - 2013	17	16	97	6
Iron	1962 - 2013	51	21	78	2
Vacuum cleaner	1969 - 2013	44	25	75	2
Toothbrush	1975 - 2013	38	6	26	1
GPS	2007 - 2013	6	8	20	3

Example Mobile Phone

Additional new Characteristics to Mobile Phone



B. **Learning:** Continuous learning, new characteristics are not independent

- Identification of waterfall process between new characteristics that highlight the learning effect

6 Discussion:

- Review the Lancasterian Approach of **Novelty.**
- Extension of characteristics space of different goods → Mobile phone (young dynamic) but also Iron (Old product)
- The gap between evolutionary consumption theory, the emergence of new Lancasterian characteristics.